

Cisco Service Control Deployment Services: Cisco Service Control Engine and Collection Manager

Cisco Service Control Integration Level 1: Global Traffic Analysis

Cisco® Services provides consultation, full onsite deployment, and customization services for the first level of service control, which includes deployment of the Cisco SCE 1000 Series Service Control Engine (SCE) or Cisco SCE 2000 Series Service Control Engine and Collection Manager. With the collected traffic records from one or multiple Cisco SCEs, the Collection Manager can provide the data to a reporting tool, including a customer database, to provide insight into network traffic. This intelligence can help service providers greatly maximize the use of network resources, optimize the experience of each subscriber, and speed the deployment of various new services to market.

Global traffic analysis can report on activity including:

- Top users
- Most popular applications
- Peak flows

So service providers can understand:

- What is using network resources
- When they need a capacity upgrade
- What is causing congestion

More than 200 types of usage reports are available. By tracking all IP traffic flows, service providers can better understand application issues and trends, including the effects of voice-over-IP services from Web-based competitors such as Skype; the extent and effects of malicious and annoying traffic, such as denial-of-service packet flooding and unsolicited e-mail; the levels of usage and bandwidth consumption for specific applications, such as peer-to-peer; and much more.

Cisco SCE 1000 Series and 2000 Series SCEs (Figure 1) are carrier-grade network elements designed for high-capacity stateful application and session-based classification and management of application-level IP traffic per subscriber. These devices inspect packet flows and fully reconstruct flows and the Layer 7 state of each application flow, making the network application-aware and subscriber-aware. This awareness allows for control of traffic based on configurable rules.

Please refer to the Cisco Service Control Overview brochure and other service control level brochures for more information. Cisco service control solutions are based on a sequential deployment strategy with network elements and technologies enabling enhanced levels of service control.

Figure 1. Cisco SCE 2000 Series Service Control Engine



The Collection Manager software receives raw data records from one or more Cisco SCE platforms. These data records are collected and processed in one of its adapters. Raw data records contain a variety of information and statistics, depending on how the system is configured, and include data records about transactions, subscriber usage, and traffic carried on a link for a defined interval. The Collection Manager has a prepackaged reporting tool and 100 report templates to generate a wide range of reports on network activities and application usage. Service providers can choose to use the Collection Manager as an efficient standalone solution or integrate it using the Cisco SCE with existing usage management, mediation, and billing solutions. The Collection Manager data can be stored in a Java Database Connectivity (JDBC)-compliant database such as Oracle 9.2, Sybase ASE 12.5, or MySQL 4. It can also store the data in content verification system (CSV) format files.

Modular Approach to Cisco Services

Cisco Services lets you choose exactly the assistance you require, whether that means consultation with a subject matter expert (SME); a detailed deployment assessment; full deployment services with design, installation, configuration, and testing; or customized services.

Consultation with a Cisco Service Control Solution SME is available in one-week or two-week increments. These engagements can help reduce time to deployment by making available a dedicated expert who works with the in-house installation team to provide guidance and recommendations during the initial install. Service control level 1 engagements include an “Installation and Usage Report Service Package” that details the full lifecycle services for deployment of the Cisco SCE and the Collection Manager. The Cisco consultant guides the team through installation, report setup, and day two support needs.

Deliverables include:

- Installation assistance and recommendations
- Report setup assistance and configuration of reports

Consulting Support and Review Services feature Cisco Services consultants assisting customers in the design, staging, testing, deployment, and acceptance testing phases of all service control projects.

Deliverables include review and comments on:

- Low-level design document
- Site requirements specification
- Network staging plan
- Network implementation plan
- Network ready for use document

Full Deployment Services are available for customers who want to engage Cisco Services for installation of the Cisco SCE and the Collection Manager using the Cisco prepare, plan, design, implement, operate, and optimize (PPDIOO) methodology. These phases include project management, design, and implementation consulting and integration services. Under this option, Cisco Services takes ownership for the tasks and deliverables specified under a fixed-price statement of work (SoW).

The Cisco Services team will assess the current network and systems architecture and develop a high-level architecture for the service control solution based on business requirements during the planning phase of the project. After a high-level architecture is agreed upon, the team will prepare an overall project plan. A detailed design document will be developed during the design phase. The implementation plan will cover a lab validation phase of the design, a market trial for a test market, and a production rollout for all markets. The implementation team will transition the implemented system to operations by providing knowledge transfer and “as built” documents to the operations staff. Customers needing operations support can purchase ongoing subscription services for maintaining and operating the system.

The deployment packages are designed in a modular fashion. Depending on the customer requirements, different deployment options can be selected. The different service options that are available include:

- Solution planning services to evaluate the current customer environment and business requirements and to develop a solution architecture and overall project plan
- Solution design service to develop detailed design to meet business requirements
- Deployment services for Cisco SCE (single site) and the Collection Manager with internal Sybase database
- Deployment services for Cisco SCE (multisite) and the Collection Manager
- Deployment services for Cisco SCE in multigigabit service control point (MGSCP) solution
- Deployment services of external database (Oracle, Sybase, and MySQL)
- Deployment of high-availability configurations for Cisco SCE, Collection Manager, Subscriber Manager, and database
- Custom report development

Typical deliverables on a PPDI project include:

- Customer requirements document
- Site requirements specification
- Project plan
- Project management
- Solution design document
- Implementation plan
- Hardware and software installation
- Configuration
- Acceptance test plan
- Acceptance testing and test report

- Knowledge transfer on implemented system
- Documentation on implemented system

Customization Services are also available for Cisco Service Control solutions that might require integration with an external database, customized reporting, high-availability configurations, policy server integration, and other activities.

Using Cisco Expertise

Cisco engineers help service providers rapidly plan, design, test, install, and optimize Cisco service control products and technologies while mitigating risks and accelerating time to market for new services. Cisco Services uses best practices and proven methodologies for each phase of the project lifecycle. We utilize tools and test labs and collaborate with partners as necessary to help ensure the stability, availability, transparent integration, and lower cost of ownership of Cisco solutions. Cisco Services has an award-winning global technical assistance center, an extensive network of certified partners, and customer portals. Our customers have access to a large collection of certified IP experts with years of experience in all phases of deploying and supporting network infrastructures both large and small.

For More Information

For more information about Cisco Services for deployment of the Cisco SCE and the Collection Manager, visit us at: http://www.cisco.com/en/US/products/svcs/services_area_root.html or contact your Cisco account manager today.



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